



Metcalfe Federal Building Solar Rooftop System

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Metcalfe Solar Rooftop System

- ⌚ A 10 Kilowatt roof-mounted, grid connected, photovoltaic (PV) system atop the Ralph H. Metcalfe Federal Building, located at 77 W. Jackson Blvd., Chicago, IL.
- ⌚ U.S. EPA, GSA and DOE supported and funded the installation of the system.
- ⌚ System is mainly a demonstration/educational project.



Design and Permitting

- ⌚ Project was issued as a design/build contract.
- ⌚ Patrick Engineering was the successful offeror.
- ⌚ No permits required since project was located on a Federal Building.
- ⌚ ComEd reviewed specs. No interconnection permits or fees required.

Project Cost

- ∞ Total project cost - \$120,000
- ∞ Funded by GSA, EPA and DOE.
- ∞ Educational Kiosk located in lobby funded by DOE. New software being developed by DOE.



Installation

- ⌚ Did not want the system secured mechanically to the roof.
- ⌚ Used existing pavers for system ballast.



Installation

- ⌚ Manually adjustable for optimal efficiency.
- ⌚ Auto tracking was cost prohibitive.



Installation

- ⌚ System is virtually maintenance free with the exception of seasonal adjustment.
- ⌚ Tied into building electrical grid.



Environmental Benefits - System Prevents the Annual Release of:

- ∞ 50 lbs. of nitrogen oxides which contribute to smog.
- ∞ 210 lbs. of sulphur dioxide (acid rain).
- ∞ 20,000 lbs. of carbon dioxide which contributes to global warming.

